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THE **BOEING** COMPANY

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TITLE Weight & Balance Status Report - Wing VI (U)

MODEL NO. SM-80C CONTRACT NO. AF 04(694)-266

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1.0 SUMMARY

This is the second in a series of monthly reports covering the status of mass data on Boeing Wing VI hardware.

It is intended that both Operational and R & D hardware shall be functionally described in the report series. This report covers the details of the Operational hardware only. The R & D configuration and weight criteria still remains to be resolved. The R & D hardware currently under consideration is mass data summarized for reference purposes only.

Current Boeing Wing VI Operational and R&D hardware weights are summarized:

	<u>OPERATIONAL</u>			<u>R & D</u>
	<u>Current</u>	<u>Last</u>	<u>Change</u>	<u>Current</u>
Stage III (Section 43)	151.47	153.67	- 2.20	657.6 (423.3)
Stage II	435.89	441.83	- 5.94	781.0
Stage I	471.62	493.30	-21.68	669.3
TOTAL	1,058.98	1,088.80	-29.82	2,107.9

Heat protection gages account for most of the weight changes recorded in this release. Though the heat protection and ablation gages still are subject to confirmation, this release reflects the latest Boeing practical heat protection evaluations.

2.0 INTRODUCTION

This series of mass data status reports describe the Boeing Wing VI hardware configurations. This report covers data applicable to the Operational and R&D hardware. The Operational hardware is described in detail and compared to the previous status report. The R & D configuration has still not been resolved; however R & D hardware currently under consideration is summarized for reference purposes only.

3.0 DESIGN CONCEPT

3.1 First Stage Skirt

The skirt design conditions, as referenced in D2-30147-1, remain essentially unchanged except as follows;

The flared skirt has a nominal aluminum skin gage of .124" on the cylindrical section and .135" on the flared section. Cork gages used for this report are external .20" on the cylindrical section and .17" on the conical section; internal .33". PR 1910 remains estimated upon a Wing II base at this time.

3.2 Interstage 1-2

The 1-2 interstage design is referenced in D2-30147-1 with changes below.

The forward section aluminum skin is .230"; the aft .140". Cork heat protection gages used in this report include .21" on first 4 inches and .14" on remaining forward section; .11" on the aft section.

Skirt jettison currently occurs at approximately 16 seconds following the stage separation event.

3.3 Interstage 2-3

The 2-3 interstage has not changed essentially and is referenced to D2-30147-1.

3.4 Heat Deflectors

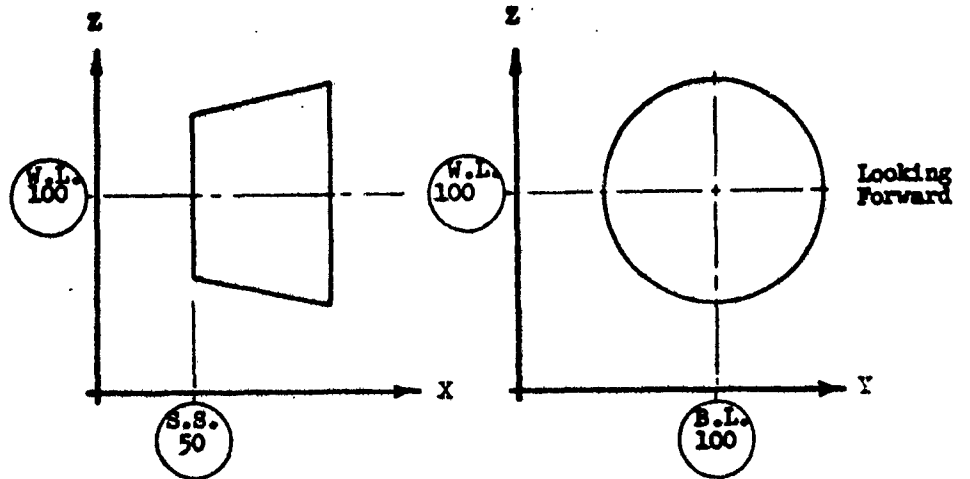
The first and third stage heat deflectors are the same as used on Wing II. Cork gages used in this report for the heat deflector support assemblies are; first stage .36" and third stage .25".

3.5 Raceways

The raceways remain essentially unchanged from D2-30147-1. However, cork gages used in this report vary from .13" to .27" depending upon location. The edge seal concept uses application of liquid PR 1910.

4.0 STATION REFERENCE DATA

Reference stations for all Boeing hardware are based upon component Section Stations. The forward interface of each production section is assumed to be Section Station 50.0.



5.0 DISCUSSION

5.1 Heat Protection

Heat Protection gages reported are those recommended by Boeing for Wing VI approval. The ablation gages incorporated in this report are Boeing's estimate of the probable ablation for the recommended gages. These values are subject to change pending review by Boeing, BSD, STL. Criteria are referenced to D2-14137, Volumes I-VI, "Design Heating Data" and D2-30047, "External Insulation Materials, Properties and Requirements."

5.2 CTII

Neither complete drawings nor layouts are available at this time, to derive Wing VI CTII installation weights. It is suggested that, until such time when substantiated data can appear in these reports, Wing II CTII increments be used. (Ref. D2-3940-21).

5.3 R & D Configuration

Upon the data record closure date of this release, an R & D configuration and related weight criteria had not been confirmed. It is impractical to report detail weight status until such time when a firm configuration base has been established. Maintaining a complete change history during a configuration study period requires an excessive expenditure of manpower for the benefit derived.

The current weight increments for the Boeing R&D subsystem hardware now under evaluation are summarized as follows:

Stage III	+506.1
(Section 43)	(+423.3)
Stage II	+345.1
Stage I	+197.7
TOTAL...	+1048.9

The above increments can be considered as additive to the Boeing Operational hardware stage weights given herein. The R&D weights do not include R & D increments of other Associate Contractor responsibility.

Page 12 presents an R&D sectional data summary for the complete Boeing FIM hardware responsibility as reflected from current AFBSD Exhibit 62-74 configuration and criteria evaluations.

6.0 SECTIONAL DATA SUMMARY (Operational - Page 11; R&D - Page 12)

The total weight, balance and inertia data are presented for Boeing responsibility hardware on each production section. Data on various expended portions of the sections are shown for sequential data integration.

An R&D summary is presented as representing data typical of current study configurations.

7.0 WEIGHT STATUS BY STAGE SUMMARY (Operational - Page 13)

A functional weight breakdown per stage is listed in summary form.

8.0 SECTIONAL BREAKDOWN BY FUNCTION (Operational - Pages 14-22)

A functional weight and balance breakdown per section is presented. These data are listed in the launch condition. Flight expended weight and balance data are broken out as required to support TDAT sequential mass data outputs.

9.0 WEIGHT STATUS BY FUNCTION (Operational - Pages 23-38)

Changes in weight over the reporting period are listed by function breakdown for each section.

10.0 WEIGHT CHANGE SUBSTANTIATION (Operational - Pages 39-41)

Substantiations are provided for changes recorded in Paragraph 9.

SECTIONAL DATA SUMMARY BOEING RESPONSIBILITY

LM SC	DESCRIPTION	DATA	EXPENDED HEIGHT LB	TOTAL WEIGHT LB	CENTER OF GRAVITY			INERTIA		
					LONG	LAT	VERT	SLUG FT ² X 10 ⁻³	ROLL	PITCH
01	RV SPACER	SIL0								
02		AERO								
03										
04	G+C SECTION	SIL0		3.54	31.04	100.00	100.00	0	0	0
05		AERO								
06										
07	R+D SECTION	SIL0								
08		AERO								
09										
10	3RD STAGE ENGINE	SIL0		23.54	98.67	107.65	112.03	.001	.003	
11		AERO	.29		92.57	110.57	118.15	0	0	
12		AERO	.78		78.40	110.56	118.14	0	0	
13		BASE	.40		124.84	107.80	110.13	0	0	
14	INTERSTAGE 2-3			124.39	60.56	101.11	100.63	.012	.007	
15	FWD	SIL0								
16		AERO								
17		BASE	.91		50.85	99.48	98.73	0	0	
18		SIL0	1.48		63.00	100.00	100.00	0	0	
19	JETTISONED	AERO	3.87		63.00	100.00	100.00	0	0	
20	PORTION	BASE								
21		JETT	101.13		62.25	101.42	100.88	.009	.006	
22	INTERSTAGE 2-3			101.23	72.37	101.42	104.55	.013	.007	
23	AFT	SIL0	1.43		79.78	102.19	103.79	0	0	
24		AERO	4.16		79.71	102.22	103.86	.001	0	
25	2ND STAGE ENGINE	SIL0		23.25	113.44	113.63	123.05	.001	.008	
26		AERO	.50		105.15	113.98	124.14	0	0	
27		BASE	.62		118.39	114.10	124.36	0	0	
28		BASE	.90		182.63	116.21	116.21	0	0	
29	INTERSTAGE 1-2			311.41	71.65	101.06	100.67	.055	.037	
30	FWD	SIL0								
31		AERO								
32		BASE	.30		50.60	100.00	100.00	0	0	
33		SIL0	4.38		72.10	100.00	100.00	.001	.001	
34	JETTISONED	AERO	4.80		70.39	100.00	100.00	.001	0	
35	PORTION	BASE	2.32		34.75	100.35	100.84	0	0	
36		JETT	282.12		72.85	101.16	100.71	.050	.034	
37	INTERSTAGE 1-2			119.36	96.18	102.28	104.83	.026	.014	
38	AFT	SIL0	2.15		96.16	103.17	105.49	0	0	
39		AERO	1.40		91.16	106.96	112.03	0	0	
40	1ST STAGE ENGINE	SIL0		56.99	220.04	110.65	118.42	.004	.071	
41		AERO	2.44		132.47	114.48	125.04	0	.003	
42		BASE	.45		158.80	117.40	130.10	0	.001	
43		BASE	1.55		314.10	100.00	100.00	0	.002	
44	SKIRT	SIL0	14.13		63.58	100.66	101.04	.073	.044	
45		AERO	3.99		68.45	100.06	100.14	.004	.002	
46		BASE	16.47		71.92	100.05	100.09	.001	.001	
47		BASE		1058.98	68.67	101.90	103.10	.004	.002	
48	MISSILE									
49		SIL0	26.80		102.06	102.06	103.32			
50		AERO	20.07		102.10	102.10	103.64			
51		BASE	23.35		102.19	102.19	103.79			
52		JETT	383.25		102.16	102.16	103.04			

Missile Section Stations

SECTIONAL DATA SUMMARY BOOKING RESPONSIBILITY						REPORT NO. WING VI R & D _____ DATE 23 May 1963 _____				
LINE	SEC.	DESCRIPTION	DATA	EXPENDED WEIGHT (LB)	TOTAL WEIGHT (LB)	CENTER OF GRAVITY			INERTIA SLUG FT ² x 10 ⁻³	
						LONG.**	LAT.	VERT.	ROLL	PITCH
1	41	RV Spacer			1.8	148.9	100.0	100.0	0	0
2			Silo							
3			Aero							
4	42	G&C Section			3.5	81.0	100.0	100.0	0	0
5			Silo							
6			Aero							
7	43	R&D Section			423.3	59.0	100.0	100.3	.016	.010
8			Silo	1.5		60.0	99.4	100.1	0	0
9			Aero	1.4		61.7	93.7	112.6	0	0
10	44	3rd Stage Engine			91.3	98.2	96.9	113.0	.002	.012
11			Silo	.6		83.3	100.3	118.5	0	0
12			Aero	1.6		84.0	101.5	118.6	0	0
13			Base	2.9		120.0	98.4	109.1	0	0
14	45	Interstage 2-3			137.7	60.3	99.6	100.3	.013	.008
15		(Fwd)	Silo							
16			Aero							
17			Base	.9		50.9	99.5	98.8	0	0
18			Silo	1.7		63.0	100.0	98.1	0	0
19		Jettisoned	Aero	4.6		63.0	100.0	98.1	0	0
20		Portion	Base							
21			Jett	111.3		62.0	99.8	100.7	.010	.006
22	45	Interstage 2-3			320.4	78.3	103.4	102.3	.041	.022
23		(Aft)	Silo	1.9		77.7	100.3	105.8	0	0
24			Aero	5.7		77.6	100.3	105.9	.001	0
25	46	2nd Stage Engine			131.6	95.6	95.4	119.6	.005	.046
26			Silo	1.4		101.7	100.9	125.4	0	.001
27			Aero	1.9		121.8	99.6	125.2	0	.001
28			Base	2.7		131.9	98.2	114.1	0	0
29	47	Interstage 1-2			329.0	71.0	100.7	100.5	.058	.040
30		(Fwd)	Silo							
31			Aero							
32			Base	.3		50.5	98.9	99.5	0	0
33			Silo	4.4		72.1	100.0	100.0	.001	.001
34		Jettisoned	Aero	4.8		70.4	100.0	100.0	.001	.001
35		Portion	Base	3.5		79.4	99.6	99.8	.001	0
36			Jett	296.5		72.3	100.8	100.5	.052	.036
37	47	Interstage 1-2			177.8	93.4	98.2	110.4	.039	.020
38		(Aft)	Silo	2.7		92.1	100.9	110.5	.001	0
39			Aero	2.2		86.0	100.9	118.9	0	0
40	48	1st Stage Engine			128.1	182.8	97.2	124.2	.010	.161
41			Silo	3.7		176.7	101.0	126.9	0	.005
42			Aero	.9		156.9	100.5	130.0	0	.001
43			Base	1.6		314.1	100.0	100.0	0	0
44	49	Skirt			363.4	68.3	100.9	103.2	.090	.054
45			Silo	15.3		68.3	99.7	101.6	.004	.002
46			Aero	4.0		71.9	99.8	100.3	.001	.001
47			Base	19.8		68.2	100.0	104.4	.005	.003
48		MISSILE			2107.9	**	100.0	105.2		
49			Silo	33.3			100.1	106.3		
50			Aero	27.0			99.9	107.1		
51			Base	31.7			99.6	104.7		
52			Jett	407.8			100.5	100.6		

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** Missile Section Stations.

BOEING

VOL

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PAGE 12

7.0 WEIGHT STATUS BY STAGE SUMMARY

<u>STAGE AND ITEM</u>	<u>OPER. WT.</u>
STAGE III	(151.47)
Raceways	13.84
G & C Provisions	4.77
Interstage 2-3 Fwd.	123.09
Heat Deflector	6.23
Attach. Provisions (G&C to HPC)	3.54
STAGE II	(435.89)
Raceways	38.74
G & C Provisions	3.30
Interstage 2-3 Aft	70.18
Interstage 1-2 Fwd	309.78
Heat Deflector	0.00
Accelerometer Support	13.89
STAGE I	(471.62)
Raceways	58.17
G & C Provisions	12.44
Interstage 1-2 Aft	95.41
Skirt	283.98
Heat Deflector	21.62
Total Missile - Boeing Hardware	(1,058.98)

BOEING WEIGHT RESPONSIBILITY
MISSILE WING VI OPERATIONAL
DATE 23 MAY 1963

BOEING WEIGHT RESPONSIBILITY		C		D		C + D	
MISSILE WING VI OPERATIONAL		UNEXPENDED		EXPENDED		TOTAL	
DATE		WT	H CG L CG V CG	WT	H CG L CG V CG	WT	H CG L CG V CG
23 MAY 1963	FUNCTIONAL LISTING						
01	RACEMAYS						
02	COVERS + CAPS						
03	HEAT PROTECTION						
04	SIL						
05	AERO						
06	COVERS + CAPS						
07	HEAT PROTECTION						
08	SIL						
09	AERO						
10							
11	INSTRUMENTATION						
12	EQUIPMENT + WIRE						
13	BASE HEAT PROTECTION						
14	EQUIP + WIRE - JETT.						
15	BASE HEAT PRO.-JETT.						
16	SIL						
17	DESTRUCT PROVISION						
18							
19	G+C INSTALLATION						
20	CABLE PROV + INSTL PRO						
21	BASE HEAT PROTECTION						
22	SIL						
23	STRUCTURE	2.04	81.00 100.00 100.00			2.04	81.00 100.00 100.00
24	UNJETTISONED						
25	SEPARATION MECH.						
26	HEAT PROTECTION						
27	SIL						
28	AERO						
29	BASE						
30	SIL						
31	JETTISONED						
32	SEPAR. MECH.- STAGE						
33	SEPAR. MECH.- PEEL						
34	HEAT PROTECTION						
35	SIL						
36	AERO						
37	BASE						
38							
39	ACCELEROMETER SUPPORT						
40							
41	HEAT DEFLECTOR INSTL.						
42	DEFLECTOR + STRUC.						
43	BASE HEAT PROTECTION						
44	SIL						
45	MISCELLANEOUS						
46							
47	CONTINGENCY						
48							
49	UNACCOUNTED						
50							
51	COLUMN TOTAL	3.54	81.04 100.00 100.00			3.54	81.04 100.00 100.00
52	SECTION TOTAL						
53							

BOEING WEIGHT RESPONSIBILITY
MISSILE VING VI OPERATIONAL
DATE 23 MAY 1963

LN	FUNCTIONAL LISTING	WT	M CG	L CG	V CG	WT	M CG	L CG	V CG	WT	M CG	L CG	V CG
01	RACEWAYS												
02	COVERS + CAPS												
03	HEAT PROTECTION												
04	SILCO												
05	AERO												
06	COVERS + CAPS	8.64	86.18	110.29	117.82					8.64	86.18	110.29	117.82
07	HEAT PROTECTION									.29	82.57	110.57	118.15
08	SILCO					.78	78.40	110.56	118.14	3.61	82.48	110.20	117.58
09	AERO	2.83	83.61	110.10	117.43								
10													
11	INSTRUMENTATION												
12	EQUIPMENT + WIRE												
13	BASE HEAT PROTECTION												
14	EQUIP + WIRE - JETT.												
15	BASE HEAT PRO.-JETT.												
16	SILCO HEAT PROTECTION												
17	DESTRUCT PROVISION												
18													
19	G+C INSTALLATION												
20	CABLE PROV + INSTL PRO	3.14	72.55	109.46	111.95					3.14	72.55	109.46	111.95
21	BASE HEAT PROTECTION	1.33	121.93	113.25	114.11					1.63	122.08	113.21	114.01
22	SILCO HEAT PROTECTION					.30	122.74	113.05	113.57				
23	STRUCTURE												
24	UNJETTISONED												
25	SEPARATION MECH.												
26	HEAT PROTECTION												
27	SILCO EXTERNAL												
28	AERO												
29	BASE												
30	SILCO INTERNAL												
31	JETTISONED												
32	SEPAR. MECH.- STAGE												
33	SEPAR. MECH.- PEEL												
34	HEAT PROTECTION												
35	SILCO												
36	AERO												
37	BASE												
38													
39	ACCELEROMETER SUPPORT												
40													
41	HEAT DEFLECTOR INSTL.	5.34	133.29	100.00	100.00					5.84	133.29	100.00	100.00
42	DEFLECTION + STRUC.	.29	131.00	102.00	100.00	.10	131.14	100.06	100.00	.39	131.03	100.02	100.00
43	BASE HEAT PROTECTION												
44	SILCO HEAT PROTECTION												
45	MISCELLANEOUS												
46													
47	CONTINGENCY												
48													
49	UNACCOUNTED												
50													
51	COLUMN TOTAL SECT 44	22.07	99.12	107.47	111.73	1.47	71.86	110.36	115.98	23.54	98.67	107.65	112.03
52													
53	SECTION TOTAL												

BOEING WEIGHT RESPONSIBILITY
MISSILE WING VI OPERATIONAL
DATE 23 MAY 1963

FUNCTIONAL LISTING

01 RACEWAYS
02 COVERS + CAPS R
03 HEAT PROTECTION R
04 SILO R
05 AERO O
06 COVERS + CAPS O
07 HEAT PROTECTION O
08 SILO O
09 AERO O
10

11 INSTRUMENTATION
12 EQUIPMENT + WIRE
13 BASE HEAT PROTECTION
14 EQUIP + WIRE - JETT.
15 BASE HEAT PRO.-JETT.
16 SILO HEAT PROTECTION
17 DESTRUCT PROVISION
18

19 G+C INSTALLATION
20 CABLE PROV + INSTL PRO
21 BASE HEAT PROTECTION
22 SILO HEAT PROTECTION
23 STRUCTURE
24 UNJETTISONED
25 SEPARATION MECH.
26 HEAT PROTECTION
27 SILO EXTERNAL
28 AERO
29 BASE
30 SILO INTERNAL
31 JETTISONED
32 SEPAR. MECH.- STAGE
33 SEPAR. MECH.- PEEL
34 HEAT PROTECTION
35 SILO
36 AERO
37 BASE
38

39 ACCELEROMETER SUPPORT
40
41 HEAT DEFLECTOR INSTL.
42 DEFLECTOR + STRUC.
43 BASE HEAT PROTECTION
44 SILO HEAT PROTECTION
45 MISCELLANEOUS
46
47 CONTINGENCY
48
49 UNACCOUNTED
50
51 COLUMN TOTAL SECT 45 FWD
52
53 SECTION TOTAL

J				K				J + K			
UNEXPENDED				EXPENDED				TOTAL			
WT	H CG	L CG	V CG	WT	H CG	L CG	V CG	WT	H CG	L CG	V CG
1.30	58.46	110.09	117.54					1.30	58.46	110.09	117.54
10.88	50.08	99.81	99.67	10.88	50.08	99.81	99.67				
.53	49.77	100.00	100.00	.53	49.77	100.00	100.00				
5.59	50.71	99.56	98.97	6.50	50.73	99.55	98.95				
53.67	61.96	101.07	101.23	53.67	61.96	101.07	101.23				
7.28	72.93	100.38	98.75	7.28	72.93	100.38	98.75				
27.56	60.01	103.02	100.55	27.56	60.01	103.02	100.55				
				1.48	63.00	100.00	100.00				
2.42	62.23	100.09	100.06	13.29	62.45	100.06	100.05				
1.90	64.84	92.67	96.32	1.90	64.84	92.67	96.32				
118.15	60.53	101.14	100.67	6.26	61.23	99.92	99.82	124.39	60.50	101.11	100.63

BOEING WEIGHT RESPONSIBILITY
MISSILE VING VI OPERATIONAL
DATE 23 MAY 1963

LM	FUNCTIONAL LISTING	L			M			L + M		
		WT	H CG	L CG	V CG	WT	H CG	L CG	V CG	TOTAL
01	RACEWAYS									
02	COVERS + CAPS									
03	HEAT PROTECTION									
04	SIL									
05	AERO									
06	COVERS + CAPS	12.32	67.89	111.63	120.22	12.32	67.89	111.68	120.22	
07	HEAT PROTECTION									
08	SIL									
09	AERO									
10										
11	INSTRUMENTATION									
12	EQUIPMENT + WIRE									
13	BASE HEAT PROTECTION									
14	EQUIP + WIRE - JETT.									
15	BASE HEAT PRO.-JETT.									
16	SIL									
17	DESTRUCT PROVISION									
18										
19	G+C INSTALLATION									
20	CABLE PROV + INSTL PRO	1.70	86.55	113.11	117.64	1.70	86.55	113.11	117.64	
21	BASE HEAT PROTECTION									
22	SIL									
23	STRUCTURE									
24	UNJETTISONED	43.38	83.36	99.64	99.69	43.38	83.36	99.64	99.69	
25	SEPARATION MECH.	14.06	75.41	97.09	98.28	14.06	75.41	97.09	98.28	
26	HEAT PROTECTION									
27	SIL									
28	AERO									
29	BASE									
30	SIL									
31	JETTISONED									
32	SEPAR. MECH.- STAGE									
33	SEPAR. MECH.- PEEL									
34	HEAT PROTECTION									
35	SIL									
36	AERO									
37	BASE									
38										
39	ACCELEROMETER SUPPORT	13.89	79.60	99.80	111.10	13.89	79.60	99.80	111.10	
40										
41	HEAT DEFLECTOR INSTL.									
42	DEFLECTOR + STRUC.									
43	BASE HEAT PROTECTION									
44	SIL									
45	MISCELLANEOUS									
46										
47	CONTINGENCY									
48										
49	UNACCOUNTED									
50										
51	COLUMN TOTAL SECT 45 AFT	95.04	79.35	101.37	104.60	5.59	79.73	102.21	103.84	101.23
52										
53	SECTION TOTAL SECT 45	213.77	68.95	101.26	102.43	11.85	69.96	101.00	101.72	225.62
54										
55										

BOEING WEIGHT RESPONSIBILITY
MISSILE WING VI OPERATIONAL
DATE 23 MAY 1963

BOEING WEIGHT RESPONSIBILITY									
MISSILE WING VI OPERATIONAL									
DATE 23 MAY 1963									
LN	FUNCTIONAL LISTING	N				P			
		WT	H CG	L CG	V CG	WT	H CG	L CG	V CG
01	RACEWAYS								
02	COVERS + CAPS								
03	HEAT PROTECTION								
04	SIL								
05	AERO								
06	COVERS + CAPS	13.66	110.65	113.73	123.83				
07	HEAT PROTECTION								
08	SIL								
09	AERO								
10		6.87	104.85	113.13	123.04				
11	INSTRUMENTATION								
12	EQUIPMENT + WIRE								
13	WASE HEAT PROTECTION								
14	EQUIP + WIRE - JETT.								
15	BASE HEAT PRO.-JETT.								
16	SIL HEAT PROTECTION								
17	DESTRUCT PROVISION								
18									
19	G+C INSTALLATION								
20	CABLE PROV + INSTL PRO								
21	BASE HEAT PROTECTION	.60	162.30	111.00	114.30				
22	SIL HEAT PROTECTION	.10	181.27	115.94	116.92				
23	STRUCTURE								
24	UNJETTISONED								
25	SEPARATION MECH.								
26	HEAT PROTECTION								
27	SIL EXTERNAL								
28	AERO								
29	BASE								
30	SIL INTERNAL								
31	JETTISONED								
32	SEPAR. MECH.- STAGE								
33	SEPAR. MECH.- PEEL								
34	HEAT PROTECTION								
35	SIL								
36	AERO								
37	CASE								
38									
39	ACCELEROMETER SUPPORT								
40									
41	HEAT DEFLECTOR INSTL.								
42	DEFLECTOR + STRUC.								
43	BASE HEAT PROTECTION								
44	SIL HEAT PROTECTION								
45	MISCELLANEOUS								
46									
47	CONTINGENCY								
48									
49	UNACCOUNTED								
50									
51	COLUMN TOTAL SECT 46	21.23	110.56	113.53	123.27	2.02	143.73	115.01	120.67
52	SECTION TOTAL								
53	SECTION TOTAL								

BOEING WEIGHT RESPONSIBILITY
MISSILE WING VI OPERATIONAL
DATE 23 MAY 1963

FUNCTIONAL LISTING

- 01 RACEWAYS
02 COVERS + CAPS R
03 HEAT PROTECTION R
04 SILO M
05 AERO R
06 COVERS + CAPS O
07 HEAT PROTECTION O
08 SILO O
09 AERO O
10
11 INSTRUMENTATION
12 EQUIPMENT + WIRE
13 BASE HEAT PROTECTION
14 EQUIP + WIRE - JETT.
15 BASE HEAT PRO.-JETT.
16 SILO HEAT PROTECTION
17 DESTRUCT PROVISION
18

G+C INSTALLATION

- 19 CABLE PROV + INSTL PHO
20 BASE HEAT PROTECTION
21 SILO HEAT PROTECTION
22 STRUCTURE
23 UNJETTISONED
24 SEPARATION MECH.
25 HEAT PROTECTION
26 SILO EXTERNAL
27 AERO
28 BASE
29 SILO INTERNAL
30 JETTISONED
31 SEPAR. MECH.- STAGE
32 SEPAR. MECH.- PEEL
33 HEAT PROTECTION
34 SILO
35 AERO
36 BASE
37
38

ACCELEROMETER SUPPORT

- 39
40
41 HEAT DEFLECTOR INSTL.
42 DEFLECTOR + STRUC.
43 BASE HEAT PROTECTION
44 SILO HEAT PROTECTION
45 MISCELLANEOUS
46
47 CONTINGENCY
48
49 UNACCOUNTED
50
51 COLUMN TOTAL SECT 47 FWD
52
53 SECTION TOTAL

BOEING WEIGHT RESPONSIBILITY MISSILE WING VI OPERATIONAL DATE 23 MAY 1963															
LN	FUNCTIONAL LISTING	Q UNEXPENDED				R EXPENDED				Q + R TOTAL					
		WT	M CG	L CG	V CG	WT	M CG	L CG	V CG	WT	M CG	L CG	V CG		
01	RACEWAYS														
02	COVERS + CAPS														
03	HEAT PROTECTION														
04	SILLO														
05	AERO														
06	COVERS + CAPS														
07	HEAT PROTECTION	1.63	65.57	114.09	124.35					1.63	65.57	114.09	124.35		
08	SILLO														
09	AERO														
10															
11	INSTRUMENTATION														
12	EQUIPMENT + WIRE														
13	BASE HEAT PROTECTION														
14	EQUIP + WIRE - JETT.														
15	BASE HEAT PROTECTION														
16	SILLO HEAT PROTECTION														
17	DESTRUCT PROVISION														
18															
19	G+C INSTALLATION														
20	CABLE PROV + INSTL PHO														
21	BASE HEAT PROTECTION														
22	SILLO HEAT PROTECTION														
23	STRUCTURE	14.09	49.96	100.24	100.41					14.09	49.96	100.24	100.41		
24	UNJETTISONED														
25	SEPARATION MECH.														
26	HEAT PROTECTION														
27	SILLO EXTERNAL														
28	AERO														
29	BASE	2.90	50.60	100.00	100.00	.30	50.60	100.00	100.00	3.20	50.60	100.00	100.00		
30	SILLO INTERNAL														
31	JETTISONED	201.04	72.77	100.03	100.02					201.04	72.77	100.03	100.02		
32	SEPAR. MECH. - STAGE	11.19	92.41	98.75	99.47					11.19	92.41	98.75	99.47		
33	SEPAR. MECH. - PEEL	39.23	64.24	105.69	102.89					39.23	64.24	105.69	102.89		
34	HEAT PROTECTION														
35	SILLO	15.02	70.92	100.23	100.12	4.38	72.10	100.00	100.00	4.38	72.10	100.00	100.00		
36	AERO					4.80	70.39	100.00	100.00	19.82	70.79	100.17	100.04		
37	BASE	14.01	85.46	106.06	103.19	2.82	84.75	100.35	100.66	16.83	85.34	105.11	103.05		
38															
39	ACCELEROMETER SUPPORT														
40															
41	HEAT DEFLECTOR INSTL.														
42	DEFLECTOR + STRUC.														
43	BASE HEAT PROTECTION														
44	SILLO HEAT PROTECTION														
45	MISCELLANEOUS														
46															
47	CONTINGENCY														
48															
49	UNACCOUNTED														
50															
51	COLUMN TOTAL SECT 47 FWD	239.11	71.56	101.10	100.69	12.30	73.81	100.08	100.20	311.41	71.65	101.06	100.67		
52	SECTION TOTAL														

BOEING WEIGHT RESPONSIBILITY
MISSILE WING VI OPERATIONAL
DATE 23 MAY 1963

FUNCTIONAL LISTING																													
IN	01	RACEWAYS	02	COVERS + CAPS	R	03	HEAT PROTECTION	R	04	SILLO	R	05	AERO	R	06	COVERS + CAPS	0	07	HEAT PROTECTION	0	08	SILLO	0	09	AERO	0	10	0	

BOEING WEIGHT RESPONSIBILITY
MISSILE WING VI OPERATIONAL
DATE 23 MAY 1963

LN	FUNCTIONAL LISTING	U			V			U + V		
		WT	H CG	L CG	V CG	WT	H CG	L CG	V CG	TOTAL
01	RACEWAYS									
02	COVERS + CAPS R									
03	HEAT PROTECTION R									
04	SILLO R									
05	AERO R									
06	COVERS + CAPS O	25.95	159.52	117.17	129.77	25.95	159.52	117.17	129.79	
07	HEAT PROTECTION O									
08	SILLO O					2.03	157.09	117.40	130.10	130.10
09	AERO O	6.74	164.01	117.19	129.61	7.19	163.68	117.21	129.04	
10										
11	INSTRUMENTATION									
12	EQUIPMENT + WIRE									
13	BASE HEAT PROTECTION									
14	EQUIP + WIRE - JETT.									
15	BASE HEAT PRO.-JETT.									
16	SILLO HEAT PROTECTION									
17	DESTRUCT PROVISION									
18										
19	G+C INSTALLATION									
20	CABLE PROV + INSTL PRO	.20	34.20	112.70	112.70	.20	34.20	112.70	112.70	
21	BASE HEAT PROTECTION									
22	SILLO HEAT PROTECTION									
23	STRUCTURE									
24	UNJETTISONED									
25	SEPARATION MECH.									
26	HEAT PROTECTION									
27	SILLO EXTERNAL									
28	AERO									
29	BASE									
30	SILLO INTERNAL									
31	JETTISONED									
32	SEPAR. MECH.- STAGE									
33	SEPAR. MECH.- PEEL									
34	HEAT PROTECTION									
35	SILLO									
36	AERO									
37	BASE									
38										
39	ACCELEROMETER SUPPORT									
40										
41	HEAT DEFLECTOR INSTL.	16.13	320.74	100.00	100.00	16.13	320.74	100.00	100.00	
42	DEFLECTOR + STRUC.	3.55	314.10	100.00	100.00	5.03	314.10	100.00	100.00	
43	BASE HEAT PROTECTION									
44	SILLO HEAT PROTECTION					.41	314.10	100.00	100.00	
45	MISCELLANEOUS									
46										
47	CONTINGENCY									
48										
49	UNACCOUNTED									
50										
51	COLUMN TOTAL SECT 48	52.55	219.49	110.73	118.56	4.44	226.57	109.72	110.81	56.99
52										
53	SECTION TOTAL									

BOEING-WEIGHT RESPONSIBILITY
MISSILE WING VI OPERATIONAL
DATE 23 MAY 1963

LN	FUNCTIONAL LISTING	WT	H CG	L CG	V CG	WT	H CG	L CG	V CG	WT	H CG	L CG	V CG
01	RACEWAYS												
02	COVERS + CAPS												
03	HEAT PROTECTION												
04	SILLO												
05	AERO												
06	COVERS + CAPS.	1.89	54.97	116.80	129.01					1.89	54.97	116.80	129.01
07	HEAT PROTECTION					.17	56.40	117.50	130.10	.17	56.40	117.50	130.10
08	SILLO					.03	56.40	117.50	130.10	.41	55.75	117.29	129.79
09	AERO												
10													
11	INSTRUMENTATION												
12	EQUIPMENT + WIRE												
13	BASE HEAT PROTECTION												
14	EQUIP + WIRE - JETT.												
15	BASE HEAT PRO.-JETT.												
16	SILLO HEAT PROTECTION												
17	DESTRUCT PROVISION												
18													
19	G+C INSTALLATION												
20	CABLE PROV + INSTL PRO	4.90	76.54	118.67	128.56					4.90	76.54	118.67	128.56
21	BASE HEAT PROTECTION	2.13	69.52	117.63	128.45	1.79	72.69	117.50	128.54	3.92	70.97	117.57	128.49
22	SILLO HEAT PROTECTION												
23	STRUCTURE												
24	UNJETTISONED	161.69	68.36	100.00	100.06					161.69	68.36	100.00	100.06
25	SEPARATION MECH.												
26	HEAT PROTECTION												
27	SILLO EXTERNAL												
28	AERO	21.96	66.54	99.75	99.53	8.53	68.60	99.91	99.62	8.53	68.60	99.91	99.62
29	BASE	67.73	69.41	100.00	100.00	14.68	72.03	99.92	99.86	25.92	67.33	99.77	99.58
30	SILLO INTERVAL					5.43	68.12	100.00	100.00	82.41	69.13	100.00	100.00
31	JETTISONED												
32	SEPAR. MECH.- STAGE												
33	SEPAR. MECH.- PEEL												
34	HEAT PROTECTION												
35	SILLO												
36	AERO												
37	BASE												
38													
39	ACCELEROMETER SUPPORT												
40													
41	HEAT DEFLECTOR INSTL.												
42	DEFLECTOR + STRUC.												
43	BASE HEAT PROTECTION												
44	SILLO HEAT PROTECTION												
45	MISCELLANEOUS												
46													
47	CONTINGENCY												
48													
49	UNACCOUNTED												
50													
51	COLUMN TOTAL SECT 49	260.68	68.53	100.62	101.02	34.59	63.93	100.94	101.54	275.27	63.53	100.66	101.08
52													
53	SECTION TOTAL	981.76	62.44	102.06	103.31	70.22	93.93	102.14	103.49	1053.98	62.53	102.06	103.52
54	MISSILE TOTAL												

(DETAIL)(SUMMARY) WEIGHT STATUS

Model <u>SM-80C</u> Wing VI		Configuration <u>Operational</u>		Original Spec. Weight Per	Appr'd Spec. Changes	Rev'd Spec. Weight As Of	Over or Under Weight	Current Status (4)+(5) or (7)+(8)+(9)	Last Status Report D2-30147 - 1 Dated 3-23-63	Changes: Last to Current Status		Basis For Current Data %		Justification Pg.
Line	Stage	Section <u>42</u>	(1)							GFE Changes (8)	Co-tractor Changes (9)	Est. Calc. (10)	Actual Data % (11)	
13	STRUCTURE													
2		Unjettisoned (Section Attach.)						2.04	2.04			100		
3		Separation Mechanism												
4		Heat Protection												
5		Silo - External												
6		Aero						1.50	1.50			100		
7		Base												
8		Silo - Internal												
9		Jettisoned												
10		Separation Mechanism - Stage												
11		Separation Mechanism - Peel												
12		Heat Protection												
13		Silo												
14		Aero												
15		Base												
16														
17		ACCELEROMETER SUPPORT												
18														
19		HEAT DEFLECTOR INSTALLATION												
20		Deflector + Structure												
21		Base Heat Protection												
22		Silo Heat Protection												
23														
24														
25		SECTION 42 TOTAL						3.54	3.54		0.00			
26														
27														
28														
29														
30														

(DETAIL)(SUMMARY) WEIGHT STATUS

Model <u>SM-80C</u> <u>Wing VI</u>		Original Spec. Weight Per	Appr'd Spec. Changes	Rev'd Spec. Weight As Of.	Over or Under Weight	Current Status (4)+(5) or (7)+(8)+(9)	Last Status Report D2-30147 - 1 Dated 3-23-63	Changes: Last to Current Status		Basis For Current Data %		Justification Pg.	
Line	Step							CFE Changes	Con- tractor Changes	For Calc.	Actual		
Section <u>44</u> (1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	3	RACEWAYS											
2		Covers + Caps R&D											
3		Heat Protection R&D											
4		Silo R&D											
5		Aero R&D											
6		Covers + Caps Operational				8.64	9.13	- .49	100				39
7		Heat Protection Operational				.29	.32	- .03	100				39
8		Silo Operational				3.61	5.57	- 1.96	100				39
9		Aero Operational											
10													
11		INSTRUMENTATION											
12		Equipment + Wire											
13		Base Heat Protection											
14		Equipment + Wire - Jettisoned											
15		Base Heat Protection - Jettisoned											
16		Silo Heat Protection											
17													
18		DESTRUCT PROVISION											
19													
20	3	G&C INSTALLATION											
21		Cable Provisions				3.14	2.97	+ .17	100				39
22		Base Heat Protection				1.63	1.63		100				
23		Silo Heat Protection											
24													
25													
26													
27													
28													
29													
30													

(DETAIL)(SUMMARY) WEIGHT STATUS

Model <u>SM-80C</u> Wing VI Configuration <u>Operational</u> Report No. <u>D2-30147-2</u> Submittal Date <u>23 May 1963</u> Reporting Period <u>23 March - 23 April</u>														
Section <u>44</u> (Continued)														
Line	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	STRUCTURE													
2	Unlettisoned													
3	Separation Mechanism													
4	Heat Protection													
5	Silo - External													
6	Aero													
7	Base													
8	Silo - Internal													
9	Jettisoned													
10	Separation Mechanism - Stage													
11	Separation Mechanism - Peel													
12	Heat Protection													
13	Silo													
14	Aero													
15	Base													
16														
17	ACCELEROMETER SUPPORT													
18														
19	3 HEAT DEFLECTOR INSTALLATION													
20	Deflector + Structure													
21	Base Heat Protection													
22	Silo Heat Protection													
23														
24														
25	3 SECTION 44 TOTAL													
26														
27														
28														
29														
30														

(DETAIL)(SUMMARY) WEIGHT STATUS

Line	Std	Model SM-80C Wing VI				Original Spec. Weight Per	Appr'd Spec. Changes	Rev'd Spec. Weight As Of	Over or Under Weight	Current Status (4)+(5) or (7)+(8)+(9)	Last Status Report D2-30147 -1 Dated 3-23-63	Changes: Last to Current Status		Basic Data		Justification Pg.	
		Configuration	Report No.	Submit Date	Reporting Period							GFZ Changes	Co-tractor Changes	For Calc.	Actual		
1	3	Section 45 End				(2)	(3)	(2)+(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2	3	RACEWAYS															
3	2	Covers + Caps R&D															
4	3	Heat Protection R&D															
5	4	Silo R&D															
6	5	Aero R&D															
7	6	Covers + Caps Operational															
8	7	Heat Protection Operational															
9	8	Silo Operational															
10	9	Aero Operational															
11	10	INSTRUMENTATION															
12	11	Equipment + Wire															
13	12	Base Heat Protection															
14	13	Equipment + Wire - Jettisoned															
15	14	Base Heat Protection - Jettisoned															
16	15	Silo Heat Protection															
17	16																
18	17	DESTRUCT PROVISION															
19	18																
20	19	G&C INSTALLATION															
21	20	Cable Provisions															
22	21	Base Heat Protection															
23	22	Silo Heat Protection															
24	23																
25	24																
26	25																
27	26																
28	27																
29	28																
30	29																

(DETAIL)(SUMMARY) WEIGHT STATUS

Model <u>SM-80C</u> <u>Wing VI</u>		Original Spec. Weight Per	Appr'd Spec. Changes	Rev'd Spec. Weight As Of	Over or Under Weight	Current Status (4)+(5) or (7)+(8)+(9)	Last Status Report D2-30147 - 1 Dated 3-23-63	Changes: Last to Current Status		Basic For Current Data %		Justification Pg.
								GFE Changes	Con- tractor Changes	Fig. Calc.	Actual	
Line	Item	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)(13)
Section 45 Fwd (Continued)												
1	STRUCTURE											
2	Unlettisoned					10.88	10.88			100		
3	Separation Mechanism											
4	Heat Protection											
5	Silo - External											
6	Aero					.53	.70					
7	Base					6.50	6.50		- .17	100		39
8	Silo - Internal									100		
9	Jettisoned											
10	Separation Mechanism - Stage					53.67	53.57		+ .10	100		39
11	Separation Mechanism - Peel					7.28	7.33		- .05	100		39
12	Heat Protection					27.56	27.33		+ .23	100		39
13	Silo											
14	Aero					1.48	2.68		- 1.20	100		39
15	Base					13.29	11.91		+ 1.38	100		39
16						1.90	1.90			100		
17	ACCELEROMETER SUPPORT											
18												
19	HEAT DEFLECTOR INSTALLATION											
20	Deflector + Structure											
21	Base Heat Protection											
22	Silo Heat Protection											
23												
24												
25	SECTION 45 F TOTAL					124.39	124.05		+ .34			
26												
27												
28												
29												
30												

(DETAIL)(SUMMARY) WEIGHT STATUS

Model <u>SM-80C</u> Wing VI		Configuration <u>Operational</u>		Report No. <u>D2-30147-2</u>		Submittal Date <u>23 May 1963</u>		Reporting Period <u>23 March - 23 April</u>		Section <u>45 Alt</u>		Original Spec. Weight Per		Appr'd Spec. Changes		Rev'd Spec. Weight As Of		Over or Under Weight		Current Status		Last Status Report		Changes: Last to Current Status		Basis For Current Data %		Qualification Pg.			
Line	Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	RACEWAYS																														
2	Covers + Caps R&D																														
3	Heat Protection R&D																														
4	Silo R&D																														
5	Aero R&D																														
6	Covers + Caps Operational																														
7	Heat Protection Operational																														
8	Silo Operational																														
9	Aero Operational																														
10																															
11	INSTRUMENTATION																														
12	Equipment + Wire																														
13	Base Heat Protection																														
14	Equipment + Wire - Jettisoned																														
15	Base Heat Protection - Jettisoned																														
16	Silo Heat Protection																														
17																															
18	DESTRUCT PROVISION																														
19																															
20	G&C INSTALLATION																														
21	Cable Provisions																														
22	Base Heat Protection																														
23	Silo Heat Protection																														
24																															
25																															
26																															
27																															
28																															
29																															
30																															

(DETAIL)(SUMMARY) WEIGHT STATUS

Model <u>SM-80C</u> <u>Wing VI</u>		Configuration <u>Operational</u>		Report No. <u>D2-30147-2</u>		Submittal Date <u>23 May 1963</u>		Reporting Period <u>23 March - 23 April</u>		Section <u>45 Aft</u> (Continued)															
Line	Stage	①		②		③		④		⑤		⑥		⑦		⑧		⑨		⑩		⑪		⑫	
				Original Spec. Weight Per		Appr'd Spec. Changes		Rev'd Spec. Weight As Of		Over or Under Weight		Current Status (4)+(5) or (7)+(8)+(9)		Last Status Report D2-30147 - 1 Dated 3-23-63		Changes: Last to Current Status		Basis For Current Data %							
1	2	STRUCTURE																							
2	2	Unjettisoned											43.38	44.38			- 1.00	100							39
3	3	Separation Mechanism											14.06	14.72			- .66	100							39
4	4	Heat Protection																							
5	5	Silo - External											1.18	1.94			- .76	100							39
6	6	Aero											11.56	9.32			+ 2.24	100							39
7	7	Base																							
8	8	Silo - Internal																							
9	9	Jettisoned																							
10	10	Separation Mechanism - Stage																							
11	11	Separation Mechanism - Peel																							
12	12	Heat Protection																							
13	13	Silo																							
14	14	Aero																							
15	15	Base																							
16	16																								
17	2	ACCELEROMETER SUPPORT											13.89	13.89				100							
18	18																								
19	19	HEAT DEFLECTOR INSTALLATION																							
20	20	Deflector + Structure																							
21	21	Base Heat Protection																							
22	22	Silo Heat Protection																							
23	23																								
24	24																								
25	2	SECTION 45 A TOTAL											101.23	102.51			- 1.28								
26	26																								
27	27																								
28	28																								
29	29																								
30	30																								

(DETAIL)(SUMMARY) WEIGHT STATUS

Model <u>SM-80C</u> <u>Wing VI</u>		Original Spec. Weight Per	Appr'd Spec. Changes	Rev'd Spec. Weight As Of	Over or Under Weight	Current Status	Last Status Report	Changes: Last to Current Status		Basis For Current Data %		Qualification Pg.
Line	Stage	(2)	(3)	(2)+(3)	(5)	(4)+(5) or (7)+(8)+(9)	(7)	(8)	(9)	(10) Est.	(11) Calc.	
Section 46 (1)												
1	2	RACEWAYS										
2		Covers + Caps R&D										
3		Heat Protection R&D										
4		Silo R&D										
5		Aero R&D										
6		Covers + Caps Operational				13.66	14.04		- .38	100		39
7		Heat Protection Operational				.50	.46		+ .04	100		39
8		Silo Operational				7.49	7.20		+ .29	100		39
9		Aero Operational										
10												
11		INSTRUMENTATION										
12		Equipment + Wire										
13		Base Heat Protection										
14		Equipment + Wire - Jettisoned										
15		Base Heat Protection - Jettisoned										
16		Silo Heat Protection										
17												
18		DESTRUCT PROVISION										
19												
20	2	C&C INSTALLATION										
21		Cable Provisions				.60	.50		+ .10	100		39
22		Base Heat Protection				1.00	1.00			100		
23		Silo Heat Protection										
24												
25	2	SECTION 46 TOTAL				23.25	23.20		+ .05			
26												
27												
28												
29												
30												

(DETAIL)(SUMMARY) WEIGHT STATUS

Model <u>SM-80C</u> Wing VI		Original Spec. Weight Per	Appr'd Spec. Changes	Rev'd Spec. Weight As Of	Over or Under Weight	Current Status	Last Status Report D2-30147	Changes: Last to Current Status	Basis For Current Data \$		Justification Pg.
Line	Star	②	③	②+③	⑤	④+⑤ or ⑦+⑧+⑨	⑦ Dated 3-23-63	⑧ GFE Changes ⑨ Contractor Changes	⑩ Est. ⑪ Calc.	⑫ Actual	⑬
Configuration <u>Operational</u> Report No. <u>D2-30147-2</u> Submittal Date <u>23 May 1963</u> Reporting Period <u>23 March - 23 April</u> Section <u>47 Fwd</u> ①											
1	2	RACEWAYS									
2		Covers + Caps R&D									
3		Heat Protection R&D									
4		Silo R&D									
5		Aero R&D									
6		Covers + Caps Operational									
7		Heat Protection Operational				1.63	1.53	+ .10	100		10
8		Silo Operational									
9		Aero Operational									
10											
11		INSTRUMENTATION									
12		Equipment + Wire									
13		Base Heat Protection									
14		Equipment + Wire - Jettisoned									
15		Base Heat Protection - Jettisoned									
16		Silo Heat Protection									
17											
18		DESTRUCT PROVISION									
19											
20		G&C INSTALLATION									
21		Cable Provisions									
22		Base Heat Protection									
23		Silo Heat Protection									
24											
25											
26											
27											
28											
29											
30											

(DETAIL)(SUMMARY) WEIGHT STATUS

Ln	Model	Configuration	Operational	Report No.	Submittal Date	Reporting Period	Original Spec. Weight Per	Appr'd Spec. Changes	Rev'd Spec. Weight As Of	Over or Under Weight	Current Status (4)+(5) or (7)+(8)+(9)	Last Status Report D2-30147 - 1 Dated 3-23-63	Changes: Last to Current Status		Basis For Current Data %		Justification Pg.
													QTE Changes	Contractor Changes	For	Calc.	
1	SM-80C	Wing VI					(2)	(3)	(2)+(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
2	STRUCTURE																
2	Unjettisoned										14.09	14.06		+ .03	100		40
3	Separation Mechanism																
4	Heat Protection																
5	Silo - External																
6	Aero										0.0	.40		- .40	100		40
7	Base										3.20	3.20			100		
8	Silo - Internal																
9	Jettisoned										201.04	201.02		+ .02	100		40
10	Separation Mechanism - Stage										11.19	11.19			100		
11	Separation Mechanism - Peel										39.23	40.37		- 1.14	100		40
12	Heat Protection																
13	Silo										4.38	4.23		+ .15	100		40
14	Aero										19.82	14.45		+ 5.37	100		40
15	Base										16.83	25.67		- 8.84	100		40
16																	
17	ACCELEROMETER SUPPORT																
18																	
19	HEAT DEFLECTOR INSTALLATION																
20	Deflector + Structure																
21	Base Heat Protection																
22	Silo Heat Protection																
23																	
24																	
25	SECTION 47 F TOTAL										311.41	316.12		- 4.71			
26																	
27																	
28																	
29																	
30																	

(DETAIL)(SUMMARY) WEIGHT STATUS

Model SM-80C Wing VI		Configuration Operational		Report No. D2-30147-2		Submittal Date 23 May 1963		Reporting Period 23 March - 23 April										
Line	Stage	Section 47 Aft		(1)	(2)	Appr'd Spec. Changes	Rev'd Spec. Weight As Of	Over or Under Weight	Current Status (4)+(5) or (7)+(8)+(9)	Last Status Report D2-30147 - 1 Dated 3-23-63	Changes: Last to Current Status		Basis For Current Data %			Justification Pg.		
						(3)	(2)+(3)	(5)	(6)	(7)	GFE Changes	Contractor Changes	(8)	(9)	(10)		(11)	(12)
1	1	RACEWAYS																
2	2	Covers + Caps R&D																
3	3	Heat Protection R&D																
4	4	Silo R&D																
5	5	Aero R&D																
6	6	Covers + Caps Operational							17.08	16.64		+	.44	100				40
7	7	Heat Protection Operational							.42	.50		-	.08	100				40
8	8	Silo Operational							3.03	5.25		-	2.22	100				40
9	9	Aero Operational																
10	10																	
11	11	INSTRUMENTATION																
12	12	Equipment + Wire																
13	13	Base Heat Protection																
14	14	Equipment + Wire - Jettisoned																
15	15	Base Heat Protection - Jettisoned																
16	16	Silo Heat Protection																
17	17																	
18	18	DESTRUCT PROVISION																
19	19																	
20	20	G&C INSTALLATION																
21	21	Cable Provisions																
22	22	Base Heat Protection							3.42	2.50		+	.92	100				40
23	23	Silo Heat Protection																
24	24																	
25	25																	
26	26																	
27	27																	
28	28																	
29	29																	
30	30																	

(DETAIL)(SUMMARY) WEIGHT STATUS

Line	Rev'd Spec. Weight AS OI	Over or Under Weight	Current Status (4)+(5) or (7)+(8)+(9)	Last Status Report D2-30147 -1 Dated 3-23-63	Changes: Last to Current Status			Original Spec. Weight Per	Appr'd Spec. Changes	Rev'd Spec. Weight AS OI	Over or Under Weight	Current Status (4)+(5) or (7)+(8)+(9)	Last Status Report D2-30147 -1 Dated 3-23-63	Changes: Last to Current Status			Basis For Current Data %	Qualification Pg
					GFS Changes	Con- tractor Changes	Actual Calc.											
1	1	STRUCTURE	1															
2	2	Unjettisoned																
3	3	Separation Mechanism																
4	4	Heat Protection																
5	5	Silo - External																
6	6	Aero																
7	7	Base																
8	8	Silo - Internal																
9	9	Jettisoned																
10	10	Separation Mechanism - Stage																
11	11	Separation Mechanism - Peel																
12	12	Heat Protection																
13	13	Silo																
14	14	Aero																
15	15	Base																
16	16																	
17	17	ACCELEROMETER SUPPORT																
18	18																	
19	19	HEAT DEFLECTOR INSTALLATION																
20	20	Deflector + Structure																
21	21	Base Heat Protection																
22	22	Silo Heat Protection																
23	23																	
24	24																	
25	25	SECTION 47 A TOTAL																
26	26																	
27	27																	
28	28																	
29	29																	
30	30																	

(DETAIL)(SUMMARY) WEIGHT STATUS

Model SM-80C Wing VI		Configuration Operational		Report No. D2-30147-2		Submittal Date 23 May 1963		Reporting Period 23 March - 23 April							
Line No	Stage	Section 48	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Justification Pg.															
Changes: Last to Current Status															
OFF Changes															
Con-tractor Changes															
Basis For Current Data %															
Calc.															
Actual															
1	1	RACEWAYS													
2		Covers + Caps	R&D												
3		Heat Protection	R&D												
4		Silo	R&D												
5		Aero	R&D												
6		Covers + Caps	Operational					25.95	25.95			100			
7		Heat Protection	Operational												
8		Silo	Operational					2.03	1.71			+ .32	100		40
9		Aero	Operational					7.19	13.43			- 6.24	100		40
10															
11		INSTRUMENTATION													
12		Equipment + Wire													
13		Base Heat Protection													
14		Equipment + Wire - Jettisoned													
15		Base Heat Protection - Jettisoned													
16		Silo Heat Protection													
17															
18		DESTRUCT PROVISION													
19															
20	1	G&C INSTALLATION													
21		Cable Provisions						.20	.20				100		
22		Base Heat Protection													
23		Silo Heat Protection													
24															
25															
26															
27															
28															
29															
30															

(DETAIL)(SUMMARY) WEIGHT STATUS

Model <u>SM-80C</u> <u>Wing VI</u>		Configuration <u>Operational</u>		Report No. <u>D2-30147-2</u>		Submittal Date <u>23 May 1963</u>		Reporting Period <u>23 March - 23 April</u>											
Line	Stage	Section <u>48</u> (Continued)																	
		(1)																	
1	STRUCTURE																		
2	Unjettisoned																		
3	Separation Mechanism																		
4	Heat Protection																		
5	Silo - External																		
6	Aero																		
7	Base																		
8	Silo - Internal																		
9	Jettisoned																		
10	Separation Mechanism - Stage																		
11	Separation Mechanism - Peel																		
12	Heat Protection																		
13	Silo																		
14	Aero																		
15	Base																		
16																			
17	ACCELEROMETER SUPPORT																		
18																			
19	HEAT DEFLECTOR INSTALLATION																		
20	Deflector + Structure																		
21	Base Heat Protection																		
22	Silo Heat Protection																		
23																			
24																			
25	SECTION 48 TOTAL																		
26																			
27																			
28																			
29																			
30																			

(DETAIL)(SUMMARY) WEIGHT STATUS

Model <u>SM-80C</u> Wing VI		Configuration <u>Operational</u>		Report No. <u>D2-30147-2</u>		Submittal Date <u>23 May 1963</u>		Reporting Period <u>23 March - 23 April</u>		Original Spec. Weight Per		Appr'd Spec. Changes		Rev'd Spec. Weight As Of		Over or Under Weight		Current Status <u>(4)+(5)</u> or <u>(7)+(8)+(9)</u>		Last Status Report D2-30147 <u>±1</u> Dated <u>3-23-63</u>		Changes: Last to Current Status		Basis For Current Data %		Justification Pg.			
Ln	Id	Section <u>49</u>		<u>(1)</u>		<u>(2)</u>		<u>(3)</u>		<u>(4)</u>		<u>(5)</u>		<u>(6)</u>		<u>(7)</u>		<u>(8)</u>		<u>(9)</u>		<u>(10)</u>		<u>(11)</u>		<u>(12)</u>		<u>(13)</u>	
1		RACEWAYS																											
2		Covers + Caps		R&D																									
3		Heat Protection		R&D																									
4		Silo		R&D																									
5		Aero		R&D																									
6		Covers + Caps		Operational																									
7		Heat Protection		Operational																									
8		Silo		Operational																									
9		Aero		Operational																									
10																													
11		INSTRUMENTATION																											
12		Equipment + Wire																											
13		Base Heat Protection																											
14		Equipment + Wire - Jettisoned																											
15		Base Heat Protection - Jettisoned																											
16		Silo Heat Protection																											
17																													
18		DESTRUCT PROVISION																											
19																													
20		G&C INSTALLATION																											
21		Cable Provisions																											
22		Base Heat Protection																											
23		Silo Heat Protection																											
24																													
25																													
26																													
27																													
28																													
29																													
30																													

(DETAIL)(SUMMARY) WEIGHT STATUS

Model <u>SM-80C</u> Wing VI Configuration <u>Operational</u> Report No. <u>D2-30147-2</u> Submittal Date <u>23 May 1963</u> Reporting Period <u>23 March - 23 April</u>															
Line	Station	Section <u>49</u> (Continued)													
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Changes: Last to Current Status															
Last Status Report D2-30147 - 1 Dated 3-23-63															
Current Status (4)+(5) or (7)+(8)+(9)															
Over or Under Weight															
Rev'd Spec. Weight As Of (2)+(3)															
Appr'd Spec. Changes (3)															
Original Spec. Weight Per (2)															
Basis For Current Data %															
Justification Pg.															
1	STRUCTURE														
2	Unjettisoned														
3	Separation Mechanism														
4	Heat Protection														
5	Silo - External														
6	Aero														
7	Base														
8	Silo - Internal														
9	Jettisoned														
10	Separation Mechanism - Stage														
11	Separation Mechanism - Peel														
12	Heat Protection														
13	Silo														
14	Aero														
15	Base														
16															
17	ACCELEROMETER SUPPORT														
18															
19	HEAT DEFLECTOR INSTALLATION														
20	Deflector + Structure														
21	Base Heat Protection														
22	Silo Heat Protection														
23															
24															
25	SECTION 49 TOTAL														
26															
27															
28															
29	MISSILE TOTAL - BOEING														
30															

[illegible]

Model	Configuration	Report No.	Submittal Date	Reporting Period				
SM-80C Wing VI	Operational	D2-301k7-2	23 May 1963	23 March - 23 April				
Line	Status	(1)	G.P.E. CHANGES (2)	CON- TRACTOR CHANGES (3)	EXPLANATION (4)	Page	Line	Weight Status
1		Covers & Caps		+ .10	Recalculation per new layout,	31	6	
2								
3		Unfettisoned structure		+ .03	Recalculation	32	2	
4		Aero heat protection		- .40	Redistribution	32	6	
5		Jettisoned structure		+ .02	Recalculation	32	9	
6		Separation mech. - Peel		- 1.14	Recalculation	32	11	
7		Silo heat protection		+ .15	Gage increase and new ablation rates.	32	13	
8		Aero heat protection		+ 5.37	Gage increase and new ablation rates.	32	14	
9		Base heat protection		- 8.84	Gage, material and area change.	32	15	
10								
11		Covers & Caps		+ .44	Recalculation per new layout.	33	6	
12		Silo heat protection		- .08	New ablation gage of cork.	33	8	
13		Aero heat protection		- 2.22	New cork gage and seal change.	33	9	
14		Cable provisions		+ .92	Recalculation per new layout.	33	21	
15								
16		Unfettisoned structure		+ .98	Recalculation per new layout.	34	2	
17		Separation mechanism		- 1.50	New Safe & Arm device supplied by HPC.	34	3	
18		Aero heat protection		- .24	Gage decrease and new ablation rates.	34	6	
19								
20		Silo heat protection		+ .32	New ablation gage of cork.	35	8	
21		Aero heat protection		- 6.24	New cork gage and seal change.	35	9	
22								
23		Deflector & structure		+ .13	Recalculation	36	20	
24		Base heat protection		- 4.77	Reduction in basic gage of cork.	36	21	
25		Silo heat protection		- .56	New estimated ablation rate.	36	22	
26								
27								
28								
29								
30								

JUSTIFICATION OF CHANGES SINCE LAST REPORT

Model <u>SU-80C Wing VI</u>				COM-TRACTOR CHANGES	O.P.E. CHANGES	EXPLANATION	WEIGHT STATUS	
Configuration <u>Operational</u>							Line	Page
Report No. <u>D2-30147-2</u>								
Submittal Date <u>23 May 1963</u>								
Reporting Period <u>23 March - 23 April</u>								
Line	Structure	(1)	(2)	(3)	(4)			
1	Covers & Caps			+ .15	Recalculation per new layout.	37	6	
2	Silo Heat Protection			- .02	New ablation gage of cork.	37	8	
3	Aero Heat Protection			- .01	New cork gages and seal change.	37	9	
4	Base Heat Protection			+ 1.52	Recalculation per new layout.	37	22	
5								
6	Unjettisoned structure			- 8.62	Reduced skin gage; redistribution to heat protection.	38	2	
7	Silo Heat Protection - External			- 8.99	Changed gages & ablation rates; redistribution of 5.43 # to silo - internal.	38	5	
8								
9	Aero Heat Protection			+ 5.88	Increased basic gage; changed ablation rates.	38	6	
10	Base Heat Protection			- 4.20	Decreased basic gage; changed ablation rates; redistribution from structure.	38	7	
11								
12	Silo Heat Protection - Internal			+ 5.43	Redistribution of 5.43# from silo - external; new ablation rates.	38	8	
13								
14								
15								
16	Total Missile Weight Change			-29.62				
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								